Amendments to the Claims:

The following listing of claims will replace all prior versions of claim listings in this application.

1. (currently amended) A genetically modified plant or part thereof comprising daidzein and/or derivatives thereof, wherein said plant or part thereof is active in flavonol and anthocyanin biosynthesis and comprises one or more nucleotide sequences encoding a chalcone reductase comprising the amino acid of SEQ ID NO: 2 or a fragment thereof with chalcone reductase activity and one or more nucleotide sequences encoding an isoflavone synthase comprising the amino acid sequence of SEQ ID NO: 4 or a fragment thereof with of isoflavone synthase activity.

2. (currently amended) A genetically modified plant or part thereof according to claim 1, further comprising one or more nucleotide sequences encoding a chalcone isomerase comprising the amino acid sequence of SEQ ID NO: 6 or a fragment thereof capable of catalysing the conversion of 4,2'4'-trihydroxchalcone to 7,4'-dihydroxyflavanone.

3-21. (cancelled)

22. (currently amended) A genetically modified plant or part thereof according to claim 1 wherein said one or more nucleotide sequences comprise (i) a nucleotide sequence shown in SEQ ID NO: 1, or a nucleotide sequence which hybridizes thereto under conditions of 1x SSC, 0.1% SDS, 25°C for 20 minutes and encodes a chalcone reductase; and (ii) a nucleotide sequence shown in SEQ ID NO: 3, or a nucleotide sequence which hybridizes thereto under conditions of 1x SSC, 0.1% SDS, 25°C for 20 minutes and encodes an isoflavone synthase.

23. (currently amended) A genetically modified plant or part thereof according to claim 2 wherein said one or more nucleotide sequences comprises a nucleotide sequence shown in SEQ ID NO: 5, or a nucleotide sequence which hybridizes thereto under conditions of 1x SSC, 0.1% SDS, 25°C for 20 minutes and encodes a chalcone isomerase capable of catalyzing the conversion of 4,2',4'-trihydroxchalcone to 7,4'-dihydroxyflavanone.

24. (currently amended) A genetically modified plant or part thereof according to claim 22 wherein said one or more nucleotide sequences further comprises a nucleotide sequence as shown in SEQ ID NO: 5, or a nucleotide sequence which hybridizes thereto under conditions of 1x SSC, 0.1% SDS, 25°C for 20 minutes.

25. (previously presented) A genetically modified plant or part thereof according to claim 1 wherein said plant or part thereof is selected from the group consisting of tobacco, *Lactuca sp.*, broccoli, asparagus, red cabbage, potato, spinach, rhubarb, red onion, shallot, aubergine, radish, Swiss chard, purple basil, watermelon and berries.

26-27. (cancelled)

28. (previously presented) A food product comprising a genetically modified plant or part thereof according to claim 1.

29. (previously presented) A food product according to claim 28 wherein said food product is selected from the group consisting of packaged mixed salad, soup, spread, sauce, fruit bar and ice cream.

30. (previously presented) A method for the production of a food product or nutritional supplement comprising culturing the genetically modified plant or part thereof according to claim 1 under conditions suitable for expression of a chalcone reductase or isoflavone synthase.

31. (currently amended) A method for the production of a food product or nutritional supplement comprising culturing the genetically modified plant or part thereof according to ~~claim 26~~ claims 1 or 2 under conditions suitable for expression of a chalcone reductase or isoflavone synthase.

32-33. (cancelled)

34. (currently amended) A process for increasing the content of daidzein and/or derivatives thereof in a plant or part thereof, wherein said process comprises the steps:

(i) selecting a non-isoflavone producing plant wherein said plant or part thereof is active in

anthocyanin and flavonol biosynthesis;

(ii) genetically modifying said plant to incorporate one or more nucleotide sequences encoding a chalcone reductase comprising the amino acid of SEQ ID NO: 2 or a fragment thereof with chalcone reductase activity and one or more nucleotide sequences encoding an isoflavone synthase comprising the amino acid sequence of SEQ ID NO: 4 or a fragment thereof with isoflavone synthase activity so as to increase the activity of chalcone reductase and isoflavone synthase in said plant or part thereof.

35. (currently amended) A process according to claim 34, wherein said process further comprises genetically modifying said plant or part thereof to incorporate one or more nucleotide sequences encoding a chalcone isomerase comprising the amino acid sequence of SEQ ID NO: 6 or a fragment thereof ~~to increase the activity of a chalcone isomerase~~ capable of catalyzing the conversion of 4,2',4'-trihydroxchalcone to 7,4'-dihydroxyflavanone so as to increase the activity of the chalcone isomerase.

36. (currently amended) A process according to claim 34 [[~~33~~]], wherein said plant is genetically modified to incorporate into the genome of the plant (i) a nucleotide sequence shown in SEQ ID NO: 1, or a sequence which hybridizes thereto under conditions of 1x SSC, 0.1% SDS, 25°C for 20 minutes and encodes a chalcone reductase; and (ii) a nucleotide sequence shown in SEQ ID NO: 3, or a sequence which hybridizes thereto under conditions of 1x SSC, 0.1% SDS, 25°C for 20 minutes and encodes an isoflavone synthase.

37. (previously presented) A process according to claim 35, wherein said plant is genetically modified to incorporate into the genome of the plant a nucleotide sequence as shown in SEQ ID NO: 5, or a sequence which hybridizes thereto under conditions of 1x SSC, 0.1% SDS, 25°C for 20 minutes and encodes a chalcone isomerase capable of catalyzing the conversion of 4,2',4'-trihydroxchalcone to 7,4'-dihydroxyflavanone.

38. (previously presented) A process according to claim 36, said plant is genetically modified to incorporate into the genome of the plant a nucleotide sequence as shown into the genome of the plant a nucleotide sequence as shown in SEQ ID NO: 5, or a sequence which hybridizes thereto under conditions of 1x SSC, 0.1% SDS, 25°C for 20 minutes and encodes a chalcone isomerase capable of catalyzing the conversion of 4,2',4'-trihydroxchalcone to 7,4'-dihydroxyflavanone.

39. (previously presented) A process according to claim 34 wherein said plant is selected from the group consisting of tobacco, *Lactuca sp.*, broccoli, asparagus, red cabbage, potato, spinach, rhubarb, red onion, shallot, aubergine, radish, Swiss chard, purple basil, watermelon and berries.

40. (new) A genetically modified plant or part thereof according to claim 1, wherein said one or more nucleotide sequences encoding a chalcone reductase comprises SEQ ID NO: 1, and one or more nucleotide sequences encoding an isoflavone synthase comprises SEQ ID NO: 3.

41. (new) A genetically modified plant or part thereof according to claim 2 wherein said one or more nucleotide sequences encoding a chalcone isomerase comprises SEQ ID NO: 5.